

RECEIVED

SEP 29 2008

PROOF OF PUBLICATION
STATE OF IOWA
COUNTY OF WOODBURY

AIR QUALITY
PROGRAM

The undersigned, of said County, being duly sworn, on oath states the undersigned is an employee of the SIOUX CITY JOURNAL printed and published by the Sioux City Newspapers, Inc., in Sioux City in said County and issued daily and Sunday and that the annexed printed notice of

prevention of significant
deterioration pre-constr.....

in said newspaper forone.....consecutive

.....Thurs..... issues,

the first publication thereof being on the11..... day

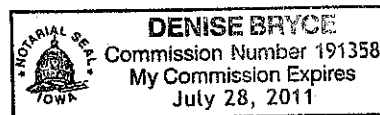
ofSept....., 2008.....

Patti McAvoy
Patti McAvoy

Subscribed and sworn before me in Sioux City, in said County,

this24..... day ofSept....., 2008.,

Denise Bryce..... Notary Public



In and for Woodbury County.

176..... Lines1..... Times, \$.....91.70.....

NOTICE OF

PREVENTION OF SIGNIFICANT

DETERIORATION PRE-CONSTRUCTION

AIR QUALITY PERMIT APPLICATION AND DRAFT PERMIT

AND

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY APPROVAL

The South Dakota Department of Environment and Natural Resources (DENR) received and reviewed the application for a Prevention of Significant Deterioration pre-construction air quality permit and the maximum achievable control technology proposal for the following applicant:

APPLICANT NAME: Hyperion Energy Center
Hyperion Refining

LLC

FACILITY LOCATION: 315th Street and
474th Avenue,
Union County;

Approximately 8 miles North of Elk Point, South Dakota

Approximately 8 miles East of Vermillion, South Dakota

Hyperion Refining LLC (Hyperion) has proposed to construct and operate the Hyperion Energy Center. The Hyperion Energy Center will consist of a petroleum refinery and an integrated gasification combined cycle power plant. The proposed Hyperion Energy Center will process on average 400,000 barrels per day of crude oil. The purpose of a Prevention of Significant Deterioration pre-construction air quality permit is to ensure that emissions from a proposed facility will not degrade the air quality beyond increments allowed by state and federal air quality regulations and that the air quality will continue to fully comply with all National Ambient Air Quality Standards that have been established to protect public health and the environment.

The proposed Hyperion project will increase air emissions of particulate matter (dust), sulfur dioxide (SO₂), nitrogen oxide (NO_x), volatile organic compounds, carbon monoxide, sulfuric acid mist, hydrogen sulfide, reduced sulfur compounds, and total reduced sulfur. As one component of the Prevention of Significant Deterioration air quality permit application, Hyperion modeled the increased particulate matter, sulfur dioxide, nitrogen oxide, and carbon monoxide emissions along with the air emissions from existing nearby sources to ensure the National Ambient Air Quality Standards will continue to be maintained. The results of the modeling demonstrate that after the Hyperion Energy Center is operational, the federal National Ambient Air Quality Standards for particulate matter, sulfur dioxide, nitrogen dioxide, and carbon monoxide will continue to be maintained.

As long as the federal National Ambient Air Quality Standards are maintained, the Prevention of Significant Deterioration air quality permit program allows particulate matter, sulfur dioxide, and nitrogen oxide emissions to increase up to allowable increments in the surrounding area. The allowable increments, which are set forth in the federal air quality rules, maintain air emissions below the National Ambient Air Standards, but still allow economic growth in the area. To ensure the project will not exceed the allowable increments, Hyperion modeled the increased particulate matter, sulfur dioxide, and nitrogen oxide air emissions. There is no increment for volatile organic compounds and carbon monoxide. The following table represents Hyperion's results from the modeling analyses and demonstrates that the Hyperion Energy Center will not consume all of the Prevention of Significant Deterioration increments in the surrounding area.

Pollutant	Allowable Increment 1	Modeling Results 1
Dust (24-hour)	30	28.07
Dust (Annual)	17	3.56
SO ₂ (3-hour)	512	141.8
SO ₂ (24-hour)	91	49.81
SO ₂ (Annual)	20	5.78
NO _x (Annual)	25	3.2

Percentage of Increment Consumed	Percentage of Increment Remaining
94%	6%
21%	79%
28%	72%
55%	45%
29%	71%
13%	87%

1 - Concentrations are measured in "micrograms per cubic meter".

The federal Prevention of Significant Deterioration air quality permit program also allows air emissions to increase up to allowable increments in Class I areas. There are two Class I areas in South Dakota; namely the federal Badlands National Park and Wind Cave National Park. Hyperion's project is greater than 300 kilometers from any Class I area. Therefore, no Class I area modeling analysis was required.

A case-by-case maximum achievable control technology standard determination has been conducted for the hazardous air pollutant emissions from the process heaters.

DENR's review of this facility indicates Hyperion can construct and operate in compliance with the state and federal air quality requirements established to protect public health and the environment. Therefore, DENR drafted a Prevention of Significant Deterioration air quality permit with conditions to ensure compliance with the state Air Pollution Control Act-SDCL 34A1 and the federal Clean Air Act. Any person desiring to comment on DENR's draft permit must submit written comments to the address below. Comments must be received by DENR within 30 days of the publication date of this public notice and may be directed to the following mailing address:

Department of Environment and Natural Resources
Division of Environmental Services
523 East Capitol, Joe Foss Building
Pierre, SD 57501

Copies of DENR's draft permit, DENR's statement of basis, and Hyperion's application are available at the above address or by contacting Kyrik Rombough, Natural Resources Engineering Director, at the same address or by telephone at (605) 773-3151. Copies are also available on DENR's air quality website at <http://www.state.sd.us/denr/DES/AirQuality/airpubnot.htm>. Copies of the complete Hyperion air quality permit file are available at the above address or at:

1. DENR's Hyperion website
<http://www.state.sd.us/denr/hyperion.htm>; and
2. DENR's Geological Survey Program
Akeley-Lawrence Science Center,
University of South Dakota
414 East Clark
Vermillion, SD 57069-2390

DENR will consider and address all comments submitted and issue a final permit decision within 30 days of the end of the public comment period. DENR will notify the applicant and each person who submitted written comments or requested notice of DENR's final permit decision, including notification of any changes to the permit based on the comments.

Any person desiring to contest the issuance of this permit and have a contested case hearing in front of the Board of Minerals and Environment must file a petition which complies with ARSD 74:09:01:01. This petition must be filed either within 30 days of this public notice or, if that person submits comments on DENR's draft permit pursuant to the paragraph above, within 30 days of receiving notice of DENR's final permit decision. If a petition for a contested case hearing is received, DENR will schedule this matter for a contested case hearing before the Board of Minerals and Environment. If no comments or objections are received within the specified 30 day periods, the draft permit becomes the final permit decision and the permit will be issued.

Steven M Firmer, Secretary
Department of Environment and Natural Resources
Published in the Sioux City Journal Sept. 11, 2008.
Legal #13121

AFFIDAVIT OF PUBLICATION

State of South Dakota)

:ss

County of Union)

Kelly Kruthoff,

an employee of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Prevention of Significant Deterioration Pre-construction

Air Quality Permit Application and Draft Permit

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 11 day of September, 2008

and that the succeeding publications were

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

on Thursday, the _____ day of _____, _____

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 85.56, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Kelly Kruthoff

Subscribed and sworn to before me

this 11 day of September, 2008

My commission expires 6-21-11

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA

Susan Odson

Notary Public

NOTICE OF PREVENTION OF SIGNIFICANT DETERIORATION PRE-CONSTRUCTION AIR QUALITY PERMIT APPLICATION AND DRAFT PERMIT AND MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY APPROVAL

The South Dakota Department of Environment and Natural Resources (DENR) received and reviewed the application for a Prevention of Significant Deterioration pre-construction air quality permit and the maximum achievable control technology proposal for the following applicant:

APPLICANT NAME: Hyperion Energy Center
Hyperion Refining LLC

FACILITY LOCATION: 315th Street and 474th Avenue, Union County,

Approximately 8 miles North of Elk Point, South Dakota
Approximately 8 miles East of Vermillion, South Dakota

Hyperion Refining LLC (Hyperion) has proposed to construct and operate the Hyperion Energy Center. The Hyperion Energy Center will consist of a petroleum refinery and an integrated gasification combined cycle power plant. The proposed Hyperion Energy Center will process on average 400,000 barrels per day of crude oil. The purpose of a Prevention of Significant Deterioration pre-construction air quality permit is to ensure that emissions from a proposed facility will not degrade the air quality beyond increments allowed by state and federal air quality regulations and that the air quality will continue to fully comply with all National Ambient Air Quality Standards that have been established to protect public health and the environment.

The proposed Hyperion project will increase air emissions of particulate matter (dust), sulfur dioxide (SO₂), nitrogen oxide (NO_x), volatile organic compounds, carbon monoxide, sulfuric acid mist, hydrogen sulfide, reduced sulfur compounds, and total reduced sulfur. As one component of the Prevention of Significant Deterioration air quality permit application, Hyperion modeled the increased particulate matter, sulfur dioxide, nitrogen oxide, and carbon monoxide emissions along with the air emissions from existing nearby sources to ensure the National Ambient Air Quality Standards will continue to be maintained. The results of the modeling demonstrate that after the Hyperion Energy Center is operational, the federal National Ambient Air Quality Standards for particulate matter, sulfur dioxide, nitrogen dioxide, and carbon monoxide will continue to be maintained.

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SEP 12 2008

AIR QUALITY
PROGRAM

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Pollutant	Allowable Increment (Duration)	Modeling Results ¹	Percentage of Increment Consumed	Percentage of Increment Remaining
Dust (24-hour)	30	28.07	94%	6%
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SO ₂ (24-hour)	91	49.81	55%	45%
SO ₂ (Annual)	20	5.78	29%	71%
NO _x (Annual)	25	3.2	13%	87%

¹ - Concentrations are measured in "micrograms per cubic meter".

The federal Prevention of Significant Deterioration air quality permit program also allows air emissions to increase up to allowable increments in Class I areas. There are two Class I areas in South Dakota; namely the federal Badlands National Park and Wind Cave National Park. Hyperion's project is greater than 300 kilometers from any Class I area. Therefore, no Class I area modeling analysis was required.

A case-by-case maximum achievable control technology standard determination has been conducted for the hazardous air pollutant emissions from the process heaters.

DENR's review of this facility indicates Hyperion can construct and operate in compliance with the state and federal air quality requirements established to protect public health and the environment. Therefore, DENR drafted a Prevention of Significant Deterioration air quality permit with conditions to ensure compliance with the state Air Pollution Control Act - SDCL 34A 1 and the federal Clean Air Act. Any person desiring to comment on DENR's draft permit must submit written comments to the address below. Comments must be received by DENR within 30 days of the publication date of this public notice and may be directed to the following mailing address:

Department of Environment and Natural Resources
Division of Environmental Services
523 East Capitol, Joe Foss Building
Pierre, SD 57501

Copies of DENR's draft permit, DENR's statement of basis, and Hyperion's application are available at the above address or by contacting Kyrik Rombough, Natural Resources Engineering Director, at the same address or by telephone at (605) 773-3151. Copies are also available on DENR's air quality website at <http://www.state.sd.us/denr/DES/AirQuality/aapubnot.htm>. Copies of the complete Hyperion air quality permit file are available at the above address or at:

1. DENR's Hyperion website - <http://www.state.sd.us/denr/hyperion.htm>; and

2. DENR's Geological Survey Program
Akeley-Lawrence Science Center, University of South Dakota
414 East Clark
Vermillion, SD 57069-2390

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submits comments on DENR's draft permit pursuant to the paragraph above, within 30 days of receiving notice of DENR's final permit decision. If a petition for a contested case hearing is received, DENR will schedule this matter for a contested case hearing before the Board of Minerals and Environment. If no comments or objections are received within the specified 30 day periods, the draft permit becomes the final permit decision and the permit will be issued.

Steven M Pirner, Secretary
Department of Environment and Natural Resources
Publish September 11, 2008
37-7-230

AFFIDAVIT OF PUBLICATION

State of South Dakota)
:ss
County of Union)

Kelly Kruithoff,
an employee of the Two Rivers Times, deposes and says that

The Two Rivers Times

is a legal weekly newspaper of a general circulation, printed and published in North Sioux City, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Prevention of Significant Deterioration Pre-construction

Air Quality Permit Application and Draft Permit

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of North Sioux City, the said place of publication; that the first publication of said notice in said newspaper was

Wednesday, the 10 day of September, 2008

and that the succeeding publications were

on Wednesday, the _____ day of _____,

on Wednesday, the _____ day of _____,

on Wednesday, the _____ day of _____,

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 81.33, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Kelly Kruithoff
Subscribed and sworn to before me

this 10 day of September, 2008

My commission expires 6-21-11

[Signature]

Notary Public

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA

NOTICE OF PREVENTION OF SIGNIFICANT DETERIORATION PRE-CONSTRUCTION AIR QUALITY PERMIT APPLICATION AND DRAFT PERMIT AND MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY APPROVAL

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SEP 12 2008

AIR QUALITY
PROGRAM

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The federal Prevention of Significant Deterioration air quality permit program also allows air emissions to increase up to allowable increments in Class I areas. There are two Class I areas in South Dakota, namely the federal Badlands National Park and Wind Cave National Park. Hyperion's project is greater than 300 kilometers from any Class I area. Therefore, no Class I area modeling analysis was required.

A case-by-case maximum achievable control technology standard determination has been conducted for the hazardous air pollutant emissions from the process heaters.

DENR's review of this facility indicates Hyperion can construct and operate in compliance with the state and federal air quality requirements established to protect public health and the environment. Therefore, DENR drafted a Prevention of Significant Deterioration air quality permit with conditions to ensure compliance with the state Air Pollution Control Act - SDCL 34A-1 and the federal Clean Air Act. Any person desiring to comment on DENR's draft permit must submit written comments to the address below. Comments must be received by DENR within 30 days of the publication date of this public notice and may be directed to the following mailing address:

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Division of Environmental Services
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Akeley-Lawrence Science Center, University of South Dakota
414 East Clark

Vermillion, SD 57069-2390

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Any person desiring to contest the issuance of this permit and have a contested case hearing in front of the Board of Minerals and Environment must file a petition which complies with ARSD 74:09:01:01. This petition must be filed either within 30 days of this public notice or, if that person submits comments on DENR's draft permit pursuant to the paragraph above, within 30 days of receiving notice of DENR's final permit decision. If a petition for a contested case hearing is received, DENR will schedule this matter for a contested case hearing before the Board of Minerals and Environment. If no comments or objections are received within the specified 30 day periods, the draft permit becomes the final permit decision and the permit will be issued.

Steven M Pirner, Secretary
Department of Environment and Natural Resources
Publish September 10, 2008

AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Clay, ss.

Penny Tucker

Being first duly sworn, deposes and says: That he/she is a resident of the County of Clay and State of South Dakota; that

THE PLAIN TALK

is a legal newspaper of general circulation, printed and published in Vermillion, in said County and State, by Broadcaster Press, Inc., and is now and has been such newspaper continuously during all the times hereinafter mentioned; that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit; and that the notice and advertisement headed:

NOTICE OF PREVENTION OF SIGNIFICANT

DETERIORATION PRE-CONSTRUCTION AIR QUALITY

PERMIT APPLICATION AND DRAFT PERMIT

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in each week

for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two-hundred paid copies weekly, and had been published in the said county of Clay for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Vermillion, the said place of publication; that the first publication of said notice in said newspaper as aforesaid

was on Friday, the 12th day of September 20 08, and that the succeeding publications were severally

on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

that the fees charged for the printing and publication of the said notice and advertisement in said newspaper as aforesaid were

Seventy-nine dollars and 11 cents

and that said fees for the printing and publishing of said notice and advertisement have been fully paid; that the full amount of the fee charged for the publishing of the said attached annexed notice and advertisement inures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Penny Tucker

Subscribed and sworn to before me

this 16th day of Sept., 20 08

Diane J. Lavoie

Exp. 5-2013 Notary Public

RECEIVED
SEP 19 2008
AIR QUALITY
PROGRAM

**NOTICE OF
INTENTION OF SIGNIFICANT
DETERIORATION
PRE-CONSTRUCTION
AIR QUALITY
PERMIT APPLICATION AND
DRAFT PERMIT
AND
MAXIMUM ACHIEVABLE
CONTROL TECHNOLOGY
APPROVAL**

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Akeley-Lawrence Science Center,
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Steven M. Pirner, Secretary
Department of Environment
and Natural Resources
Publish: September 12, 2008